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EXAMINER

HAMILTON, MONPLAISIR G

ART UNIT PAPER NUMBER

2135

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,832

Applicant(s)

MANJUNATH ET AL.

lb

Examiner

Monplaisir G Hamilton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-28 and 30-51 is/are pending in the application. *and 36-51*
- 4a) Of the above claim(s) 4 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-28 and 30-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-37 were pending. The communication filed on 3/22/04 amended Claims 1, 5, 26 and 31 and cancelled Claims 4 and 29. Claims 1-3, 5-28 and 30-51 remain for examination.

Response to Arguments

2. Applicant's arguments filed 3/22/04 have been fully considered but they are not persuasive.

Applicant argues: "Applicant amends claim 1 to include the features of claim 4. Applicant submits that the prior art fails to teach or suggest these features, i.e., wherein the arbitrary site is selected between a retrieval site or a portal site. The Examiner concedes on page 6 of the Office Action that Smith does not disclose the limitations of original claim 4. Thus, claim 1 and its dependent claims 2, 3, and 13 are not anticipated by Smith. The Examiner cites Snyder as allegedly disclosing this feature of the claims at col. 12, lines 13-55, but Applicant respectfully disagrees.

Applicant submits that Snyder does not disclose that an arbitrary site is selected between a retrieval site or a portal site."

Examiner maintains that Snyder discloses the claimed "arbitrary site is selected between a retrieval site or a portal site". Snyder specifically states that web crawlers are used to index web pages, which include home, high-level pages or root pages. The high-level pages are equivalent to the claimed portal pages. Therefore the claimed invention remains unpatentable over the disclosure of Smith in view of Snyder.

Applicant further argues: "With further regard to claim 9, Applicant submits that the prior art does not teach or suggest all the limitations of the claim. The Examiner cites Snyder as allegedly disclosing the features of claim 9 at col. 14, lines 10-22, but Applicant respectfully disagrees. There is no discussion of filtering noise images out of called image data to get a filtered image. Hence, claim 9 is allowable over the prior art for this additional reason."

Examiner maintains that Snyder discloses the claimed "filtering noise images out of called image data to get a filtered image". Snyder specifically states that the user can visually distinguish pages having undesired content and not waste time on them. Snyder further discloses that this is accomplished by "encoding and providing in the search report a standardized graphic

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representation of the appearance and rendering of each page at the time that the page is indexed. (col 14, lines 20-30). Snyder effectively discloses filtering unwanted images by allowing a user to visually distinguish images that are of interest. Examiner maintains this is equivalent to filtering unwanted images. Therefore the claimed invention remains unpatentable over the disclosure of Smith in view of Snyder and further in view of Kleinberg.

Applicant further argues: "With regard to the rejection of claims 26, 28, 29, 31 and 32, claim 26 is amended to include the limitations of claim 29. Applicant submits that claim 26, as amended, is not anticipated by the prior art, because Snyder fails to teach or suggest the limitations of claim 29. Specifically, Snyder does not disclose a filtering unit for filtering noise images out of the called image data to get a filtered image. The Examiner refers to col. 25, lines 5-55 of the reference as allegedly disclosing this feature of the claim. However, the cited excerpt of the reference is silent with respect to the limitations of original claim 29. Rather, the cited excerpt discusses processing animated GIFs to provide a static image. Thus, claim 26 and its dependent claims 28, 31 and 32 are not anticipated by Snyder."

Examiner disagrees with applicant. Snyder discloses processing of the web pages is accomplished by a network of programmed processors (col 23, lines 15-20). Snyder further discloses that web agents are programmed to patiently request and await download of files but also intelligent as to which of the files to ignore and whether to continue attempt downloading (col 23, lines 35-45). Additionally Snyder states that the invention deals with changing data by loading as much of the text and graphic as the target web page will supply, and storing a sufficient collection of the graphics and linked files to prepare a static version (col 24, lines 20-45). The disclosed static image is equivalent to the claimed filtered image. Therefore, examiner maintains that claimed invention is unpatentable over Snyder.

Applicant further argues: "Furthermore, the prior art fails to teach or suggest all of the limitations of claim 33. The Examiner points to col. 2, lines 55-65 of Richardson as allegedly corresponding to the limitations of claim 33, but Applicant respectfully disagrees. The cited portion of the reference discloses that memory and response time constraints of a system can be exceeded and that when they are exceeded, the parser stops parsing. However, claim 33 recites a control unit for outputting a control signal, wherein it is determined whether or not a number of indexed multimedia contents is equal to or greater than a predetermined number, and when the number of indexed multimedia contents is equal to or greater than the predetermined number, the control signal has a first predetermined logic level and when the number of indexed multimedia

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contents is less than the predetermined number, the control signal has a second predetermined logic level. Clearly, the reference fails to disclose these detailed features of the claim. Thus, claim 33 and its dependent claim 34 are allowable over the prior art for this additional reason."

Examiner disagrees with applicant. Richardson discloses that exponential growth can exceed memory constraints. When memory capacity is surpassed, parsing is stopped. Examiner maintains that this teaching is equivalent to the claimed outputting a first control signal when the multimedia contents indexed is equal to or greater than a predetermined number and outputting a second signal when the indexing is less than the number. The control signal controls the crawler. The disclosed memory constraint controls the parser. These two elements have the same functionality. Additionally, Snyder discloses controlling the crawler in response to buffer size (col 20, lines 25-50). Examiner maintains that the claimed invention is unpatentable.

Applicant further argues: "For claim 35, Applicant submits that the prior art does not disclose the limitations of the claim. The Examiner concedes that Snyder fails to disclose the features of claim 35, but asserts that Hoffert at col. 6, lines 20-40 discloses these features. However, the cited portion of Hoffert only discloses a list of information that is stored, without disclosing the first, second, third, and fourth databases claimed in claim 35. Hence, claim 35 and its dependent claims 36 and 37 are allowable for this reason also."

Examiner disagrees with applicant. The claimed limitation provides for one database with different types of information. Examiner maintains that Hoffert discloses the claimed database. Therefore, the claimed invention is unpatentable.

Applicant further argues: "Claims 15-20 and 23-25 are rejected over Finseth in view of Attardi. Applicant submits that there is no suggestion or motivation to combine the references. The Examiner asserts that one of ordinary skill in the art would have been motivated to modify Finseth to include storing the called multimedia contents data to a predetermined database, using the categorized structure, because it would result in the improved categorization discussed in Attardi at Section 6, lines 410. However, the categorization discussed in Attardi at section 6, lines 4-10 is not described as being related to storing the called multimedia contents data to a predetermined database. Rather the cited excerpt is silent regarding storing the data. Instead, the excerpt discusses results of a categorization algorithm. Thus, claim 15 and its dependent claims 16-20 and 23-25 are allowable over the prior art."

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

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teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both references detail methods for indexing information. Furthermore, Examiner maintains that Attardi disclose indexing web pages which efficiently communicate multimedia information to web users.

Applicant further argues: *"With further regard to claim 20, Applicant submits that the prior art does not teach or suggest filtering noise images out of the called image data to get filtered images. Here, the Examiner refers to col. 5, lines 30-60 of Finseth as allegedly disclosing the features of claim 20. However, the cited portion of the reference fails to disclose the claimed features. Col. 5, lines 30-60 is silent with regard to filtering noise images out of the called image data to get filtered images. The excerpt describes a web page rendering process in which image scale and format information is used to provide a rendered image. However, such a disclosure fails to describe the specifically claimed features of claim 20. Therefore, claim 20 is allowable over the prior art, for this additional reason."*

Examiner disagrees with applicant. Finseth discloses being able to create a summary image of the document and also being able to filter "Spam" websites from the index (col 5, lines 30-60, col 10, lines 45-65). The filtering process can be either visual or automatic and it enables a user to selectively choose appropriate content. Examiner maintains the disclosure of Finseth renders the claimed invention unpatentable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 26 and 28-29 and 31-32 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6643641 issued to Snyder herein referred to as Snyder.

Referring to Claim 26:

Snyder discloses a database building apparatus for multimedia contents comprising: a web visitor for accessing an arbitrary site providing multimedia contents and calling the multimedia contents by spidering the arbitrary site (col 6, lines 30-40); and a database for classifying and storing the called multimedia contents using a categorized structure of a database of the arbitrary site (col 6, lines 30-50) or using addresses storing the called multimedia contents data (col 9, lines 65-15) and a filtering unit for filtering noise images out of the called image data to get filtered image (col 14, lines 10-60; col 24, lines 35-45; col 25, lines 5-55).

Referring to Claim 28:

Snyder discloses the limitations as discussed in Claim 26 above. Snyder further discloses the multimedia contents data is image data (col, 9, lines 5-30; col 10, lines 15-25).

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Referring to Claim 31:

Snyder discloses the limitations as discussed in Claim 28 above. Snyder further discloses a parser parses keywords representing characteristics of a file name of the multimedia contents (cp; 7, lines 45-60; col 10, lines 3-10).

Referring to Claim 32:

Snyder discloses the limitations as discussed in Claim 28 above. Snyder further discloses a resolution decreasing unit for decreasing resolution of the filtered image (col 18, lines 5-15;).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder.

Referring to Claim 1:

Smith discloses a database building method for multimedia contents, the method comprising the steps of: accessing an arbitrary site providing multimedia contents through a telecommunication network (page 85, Section 2.1, lines 1-5); calling multimedia contents in by spidering (page 85, Section 2.1, lines 1-5); and classifying the multimedia contents data according to stored addresses and storing the multimedia contents data in a predetermined database (page 85, Section 1.1, lines 1-4; page 86-88).

Smith does not explicitly disclose "arbitrary site is selected between a retrieval site or a portal site".

Snyder discloses the limitations as discussed in Claim 1 above. Ferret further discloses the arbitrary site is selected between a retrieval site or a portal site (col 12, lines 13-55).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith such that the spider spiders retrieval or portal sites. One of ordinary skill in the art would have been motivated to do this because it would allow the system to access more content for indexing.

Referring to Claim 2:

Smith in view of Snyder discloses the limitations as discussed in Claim 1 above. Smith further discloses the multimedia contents data is image data (page 85, Section 2.1, lines 5-10).

Referring to Claim 3:

Smith in view of Snyder discloses the limitations as discussed in Claim 1 above. Smith further discloses the stored addresses are universal resource locators (URLS) (page 85, Section 2.1, lines 5-10).

Referring to Claim 12:

Smith in view of Snyder discloses the limitations as discussed in Claim 1 above. Smith further discloses decreasing the resolution of the called multimedia contents if the multimedia content is an image and storing the image of which resolution was decreased in the predetermined database according to a categorized structure (Section 2.1.1, lines 1-5).

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Referring to Claim 13:

Smith in view of Snyder discloses the limitations as discussed in Claim 3 above. Smith further discloses the URL of a web page storing the called multimedia contents is stored in the predetermined database using the URL information (Section 3.1.2, lines 1-5; Section 3.4, lines 1-8).

5. Claims 5-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder further in view of Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg.

Referring to Claim 5:

Smith in view Snyder of discloses the limitations as discussed in Claim 1 above.

Smith in view of Snyder do not explicitly disclose step (b) further comprises the sub-steps of: (b-1) inputting a search word; (b-2) parsing texts corresponding to file names of multimedia contents or texts corresponding to sub-categories in hyper text markup language (HTML) web page data having retrieved results from the input search word; and (b-3) calling multimedia contents data having addresses corresponding to the parsed texts.

Kleinberg discloses (b-1) inputting a search word (Section 2.1, lines 25-30); (b-2) parsing texts corresponding to file names of multimedia contents or texts corresponding to sub-categories in hyper text markup language (HTML) web page data having retrieved results from the input

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search word (Section 2.1, lines 45-65); and (b-3) calling multimedia contents data having addresses corresponding to the parsed texts (Section 2.1, lines 45-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Smith in view of Snyder to retrieve sites to be spidered by first issuing a query to limit the number of sites that will be spidered. One of ordinary skill in the art would have been motivated to do this because it would decrease the computations needed during the spidering process (Kleinberg: Section 2.1, lines 12-15).

Referring to Claim 6:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above. Kleinberg further discloses visiting a corresponding category when the texts corresponding to the sub-category are parsed in a loaded HTML web page data (Section 2.1, lines 45-65).

Referring to Claim 8:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above. Smith further discloses the called multimedia contents data is called image data (Section 1.1, lines 2-5).

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Referring to Claim 9:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 8 above. Snyder further discloses filtering noise images out of the called image data to get a filtered image (col 14, lines 10-22).

6. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder and Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg further in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi et al.

Referring to Claim 7:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above.

Smith and Snyder further in view of Kleinberg do not explicitly disclose “keywords representing characteristics of the texts corresponding to the sub-categories together with the texts corresponding to the file names of the multimedia contents are parsed in loaded HTML web page data”.

Attardi discloses keywords representing characteristics of the texts corresponding to the sub-categories together with the texts corresponding to the file names of the multimedia contents are parsed in loaded HTML web page data (Section 4.1, lines 1-10).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith and Snyder further in view of Kleinberg such that keywords found in the document are parsed for indexing. One of ordinary skill in the art would have been motivated to do this because it would allow the system to determine where the URL or image should be categorized (Attardi: Section 4.2, lines 1-5).

Referring to Claim 14:

Smith and Snyder in view of Kleinberg further in view of Attardi disclose the limitations as discussed in Claim 7 above. Smith further discloses at least one of URL information or keyword information together with information on respective images is stored in respective predetermined databases so that keywords can be linked to individual images (Section 3.1.1-Section 3.4, lines 1-8).

7. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder and Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg further in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 10:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 9 above.

Smith and Snyder further in view of Kleinberg do not explicitly disclose “determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value.”

Schuetze discloses determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value (col 25, lines 1-9).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith and Snyder further in view of Kleinberg to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

Referring to Claim 11:

Smith and Snyder in view of Kleinberg further in view of Schuetze disclose the limitations as discussed in Claim 10 above. Schuetze further discloses the predetermined threshold value is 10,000 (col 8, lines 35-40).

Schuetze does not explicitly disclose the predetermined threshold value is 128. However, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to lower this value to 128. One of ordinary skill in the art would have been motivated to do this because it would allow a lower rejection rate (col 25, lines 3-5)

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8. Claims 15-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6271840 issued Finseth et al, herein Finseth in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi.

Referring to Claim 15:

Finseth discloses a database building method for multimedia contents, the method comprising the steps of: accessing an arbitrary site providing multimedia contents using a database having a categorized structure (col 4, lines 25-40); calling multimedia contents data by spidering the arbitrary site (col 4, lines 55-60).

Finseth does not explicitly disclose “storing the called multimedia contents data to a predetermined database, using the categorized structure.”

Attardi discloses storing the called multimedia contents data to a predetermined database, using the categorized structure (Section 4.1, lines 13-15; Section 4.2, lines 1-5; Section 6, lines 4-10).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Finseth storing the called multimedia contents data to a predetermined database, using the categorized structure. One of ordinary skill in the art would have been motivated to do this because it would (Section 6, lines 4-10).

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Referring to Claim 16:

Finseth in view of Attardi discloses the limitations as discussed in Claim 15 above.

Finseth further discloses the multimedia contents data is image data (page 85, Section 2.1, lines 5-10).

Referring to Claim 17:

Finseth in view of Attardi discloses the limitations in Claim 15 above. Attardi further discloses step (b) further comprising the sub-steps of (b-1) loading root HTML web page data from the arbitrary site (Section 4.1, lines 1-4); (b-2) parsing texts corresponding to a sub-category or corresponding to file names of multimedia contents in the loaded HTML web page data (Section 4.1, lines 4-10); and (b-3) calling multimedia contents data of addresses corresponding to the parsed texts (Section 4.1, lines 4-10; Section 4.1, lines 16-19).

Referring to Claim 18:

Finseth in view of Attardi discloses the limitations in Claim 17 above. Attardi further discloses before the step (b-3), visiting the corresponding sub-category of step (b-2) when texts corresponding to the sub-category are parsed in the loaded HTML web page data (Section 4.1, lines 16-19).

Referring to Claim 19:

Finseth in view of Attardi discloses the limitations in Claim 17 above. Attardi further discloses in step (b-2), keywords representing characteristics of the text corresponding to the

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subcategory or the texts corresponding to the file names of multimedia contents are parsed (Section 4.1, lines 3-6).

Referring to Claim 20:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Finseth further discloses (b-4) after step (b-3), filtering noise images out of the called image data to get filtered images (col 5, lines 30-60).

Referring to Claim 23:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Finseth further discloses decreasing the resolution of the called multimedia contents if the multimedia content is an image and storing the image of which resolution was decreased in the predetermined database according to a categorized structure (col 5, lines 50-60; col 6, lines 5-10).

Referring to Claim 24:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Attardi further discloses a URL of a web page storing the called multimedia contents is stored in the predetermined database, using the categorized structure (Section 4.2, lines 1-5).

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Referring to Claim 25:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Attardi further discloses at least one of category information and keyword information, together with information of individual images, is stored in respective predetermined databases (Section 4.2, lines 1-5).

9. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6271840 issued Finseth et al, herein Finseth in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi further in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 21:

Finseth in view of Attardi discloses the limitations in Claim 16 above.

Finseth in view of Attardi do not explicitly disclose "(b-4-1) determining whether or not a pixel number of the filtered images is equal to or greater than a predetermined threshold value; and (b-4-2) when the pixel number of the filtered image is equal or greater than the predetermined threshold value, indexing the corresponding image"

Schuetze discloses determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value (col 25, lines 1-9).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Finseth in view of Attardi to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

Referring to Claim 22:

Finseth in view of Attardi further in view of Schuetze disclose the limitations as discussed in Claim 21 above. Schuetze further discloses the predetermined threshold value is 10,000 (col 8, lines 35-40).

Schuetze does not explicitly disclose the predetermined threshold value is 128. However, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to lower this value to 128. One of ordinary skill in the art would have been motivated to do this because it would allow a lower rejection rate (col 25, lines 3-5).

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi

Referring to Claim 27:

Snyder discloses the limitations as discussed in Claim 26 above. Snyder further discloses the web visitor selects and visits arbitrary retrieval sites, loads root HTML web page data from

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the arbitrary retrieval sites (col 22, line 65-col 23, line 5); hierarch ally visits other web pages or sites linked to the loaded HTML web page data (col 23, lines 1-10).

Snyder does not explicitly disclose "visits a corresponding sub-category after texts corresponding to the sub-category are parsed in the loaded HTML web page data; and having addresses corresponding to the pared texts corresponding to the sub-category".

Attardi discloses visiting a corresponding sub-category after texts corresponding to the sub-category are parsed in the loaded HTML web page data; and having addresses corresponding to the pared texts corresponding to the sub-category (Section 4.1, lines 1-16; Section 6, lines 1-8).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Attardi such that a sub-category is visited and parsed. One of ordinary skill in the art would have been motivated to do this because it would allow the parser to index information contained in a web Catalogue (Section 4.1, lines 10-16)

11. Claims 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 30:

Snyder discloses the limitations in Claim 26 above.

Snyder do not explicitly disclose "the filtering unit determining whether or not a pixel number of the filtered images is equal to or greater that a predetermined threshold value; and

when the pixel number of the filtered image is equal or greater that the predetermined threshold value, indexing the corresponding image”

Schuetze discloses the filtering unit determining whether or not a pixel number of the filtered image is equal to or greater that a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater that the predetermined threshold value (col 25, lines 1-9).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Snyder to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

12. Claims 33-34 rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 6108620 issued to Richardson et al.

Referring to Claim 33:

Snyder discloses the limitations as discussed in Claim 26 above.

Snyder does not explicitly disclose “a control unit for outputting a control signal, wherein it is determined whether or not a number of indexed multimedia contents is equal to or grater that a predetermined number, and when the number of indexed multimedia contents is equal to or greater that the predetermined number, the control signal has a first predetermined logic level and when the indexed multimedia contents is less than the predetermined number, the control signal has a second predetermined logic level.”

Richardson discloses a control unit for outputting a control signal, wherein it is determined whether or not a number of indexed multimedia contents is equal to or greater than a predetermined number, and when the number of indexed multimedia contents is equal to or greater than the predetermined number, the control signal has a first predetermined logic level and when the indexed multimedia contents is less than the predetermined number, the control signal has a second predetermined logic level (col 2, lines 55-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Snyder such that a logic signal about the number of indexed materials can be used to decide whether or not to continue parsing. One of ordinary skill in the art would have been motivated to do this because it would allow the indexing method to stop when memory is depleted (col2, lines 55-65).

Referring to Claim 34:

Snyder in view of Richardson discloses the limitations as discussed in Claim 33 above. Richardson further discloses responding to the control signal having the first predetermined logic level, a parser finishes parsing, and responding to the control signal having the second predetermined logic level, the parser parses text corresponding to the addresses of other web pages or sites linked to HTML web page data (col 2, lines 55-65).

13. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 5903892 issued to Hoffert et al, herein referred to as Hoffert.

Art Unit: 2135

Referring to Claim 35:

Snyder discloses the limitations as discussed in Claim 26 above.

Snyder does not explicitly disclose “a first database for storing category information; a second database for storing URL information; a third database for storing lists of keywords; and a fourth database for storing multimedia contents indexed by information stored in the first database, second database, and third database.”

Hoffert a first database for storing category information; a second database for storing URL information; a third database for storing lists of keywords; and a fourth database for storing multimedia contents indexed by information stored in the first database, second database, and third database (col 6, lines 20-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Snyder such that information is stored in multiple databases. One of ordinary skill in the art would have been motivated to do this because it would allow quick and efficient access to the data.

Referring to Claim 36:

Snyder in view of Hoffert discloses the limitations as discussed in Claim 35 above.

Hoffert further discloses the fourth database stores information on URLs storing indexed multimedia contents using information stored in the first database second database and third database (col 7, lines 50-65; col 8, lines 15-25).

Art Unit: 2135

Referring to Claim 37:

Snyder in view of Hoffert discloses the limitations as discussed in Claim 35 above.

Hoffert further discloses the multimedia contents stored in the fourth database are thumbnails of original images, which are generated by decreasing resolution of the original image (col 7, lines 60-65; col 20, lines 1-40).

Final Rejection

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2135

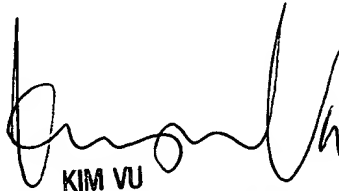
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is (703) 305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monplaisir Hamilton


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